

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently amended): An accounting system ~~including a plurality of host~~
2 ~~computers, an accounting server connected to said plurality of host computers, a storage control~~
3 ~~device connected to said plurality of host computers and said accounting server and having a~~
4 ~~plurality of channel ports for performing data input/output operations, and storage devices~~
5 ~~connected to said storage control device for storing data input to and output from said plurality of~~
6 ~~host computers, comprising:~~
7 a plurality of host computers;
8 an accounting server in data communication with said host computers;
9 a storage control device having a plurality of channel ports for receiving data
10 input/output operations from said host computers, said storage control device in data
11 communication with said accounting server;
12 storage devices operative with said storage control device to store data received
13 from said host computers and to retrieve data for transmission to said host computers;
14 accounting data generating means for generating accounting data ~~comprising~~
15 based on at least a number of times of access and or a data transfer quantity for each of one or
16 more accounting subject control units; and
17 transfer means for informing said accounting server of said accounting data
18 generated by said accounting data generating means;
19 wherein for each said accounting subject control unit, accounting data is
20 generated using metered accounting or fixed accounting, depending on whether an upper limit is
21 defined for either a number of accesses per unit time or a quantity of data transferred per unit of
22 time.

1 2. (Currently amended): An accounting system according to Claim 1,
2 wherein ~~each of said~~an accounting subject control units ~~includes at least~~is one of a host
3 computer, a World Wide Name, a channel port, a storage device, or ~~and~~ an in-storage-device
4 area.

1 3. (Original): An accounting system according to Claim 1, wherein said
2 storage control device is associated with a service processor and includes transfer means for
3 informing said service processor of said accounting data.

1 4. (Currently amended): An accounting system according to Claim 3, further
2 comprising:

3 means for setting ~~an~~said upper limit value of said accounting data in said
4 accounting subject control units, said means being made to operate from at least one of said
5 accounting server ~~and or~~ said service processor.

1 5. (Currently amended): An accounting system according to Claim 4,
2 wherein said upper limit value is determined on the basis of a predetermined period which
3 includes, as a unit, at least one of a day, a week, a month, ~~and or~~ a year.

1 6. (Currently amended): An accounting system according to Claim 4,
2 wherein said storage control device includes means which operates so that when ~~a data~~
3 ~~input/output request issued from one of said host computers is larger than~~ said upper limit value
4 is set, said means does not ~~accept process~~ said data input/output request ~~larger than~~when said
5 upper limit value has been exceeded.

1 7. (Currently amended): An accounting system according to Claim 4,
2 wherein, in an accounting subject control unit in which said upper limit value has not been set
3 yet, meter accounting is ~~made used and is~~ based on at least one of said number of times of access
4 ~~and or~~ said data transfer quantity.

1 8. (Currently amended): An accounting system according to Claim 4,
2 wherein fixed accounting ~~for said~~ is used for an accounting subject control unit in which said
3 upper limit value has been set ~~is made based on fixed accounting~~.

1 9. (Original): An accounting system according to Claim 7, wherein at least
2 one of said accounting server and said service processor has means for fetching said accounting
3 data of said storage control device every predetermined period, and means for calculating rates
4 on the basis of said accounting data fetched by said fetching means and for performing rate
5 management.

1 10. (Currently amended): An accounting system according to Claim 1,
2 wherein a connection between said storage control device and said host computers is made
3 through serial channels of optical fibers so as to constitute a LAN.

1 11. (Previously presented): An accounting system according to Claim 4,
2 wherein said storage control device has I/O control portions for setting at least said upper limit
3 values and generating accounting data in accordance with said upper limit values, and a shared
4 memory for storing said accounting data.

1 12. (Currently amended): An accounting method for making accounting for
2 operation of a plurality of host computers in a storage-related accounting system which
3 comprises said plurality of host computers, an accounting server, a storage control device
4 connected at least to said plurality of host computers and to said accounting server for
5 performing data input/output operation through channel ports, and a storage device for storing
6 data processed by said storage control device, said accounting method comprising steps of:

7 (a) designating accounting subject control units;

8 (b) for at least some of said accounting subject control units, determining an upper
9 limit value for a number of times of access per unit of time and ~~for an~~ upper limit value for a data
10 transfer quantity per unit of time, wherein access and data transfer occur for each of said
11 accounting subject control units;

12 (c) generating accounting data of said accounting subject control units in
13 accordance with said upper limit values; and
14 (d) recording said accounting data,
15 wherein for each said accounting subject control unit, accounting data is
16 generated using metered accounting or fixed accounting, depending on whether an upper limit is
17 defined in said accounting subject control unit for either a number of accesses per unit time or a
18 quantity of data transferred per unit of time.

1 13. (Currently amended): An accounting method according to Claim 12,
2 wherein each said accounting subject control units is a ~~include~~ host computers, a World Wide
3 Names, a channel ports, ~~and or a~~ storage areas in a storage devices.

1 14. (Original): An accounting method according to Claim 12, wherein said
2 accounting server is associated with a service processor for controlling and supervising said
3 storage control device.

1 15. (Original): An accounting method according to Claim 12, wherein, in said
2 step (b), said accounting server makes an upper limit values setting request to said storage
3 control device, and in response to said request, said storage control device determines said upper
4 limit values for said number of times of access and said data transfer quantities.

1 16. (Original): An accounting method according to Claim 12, wherein said
2 generation of said accounting data stated in said step (c) is made by said storage control device in
3 accordance with said upper limit values.

1 17. (Original): An accounting method according to Claim 12, wherein, in said
2 step (d), said accounting server makes an accounting data sending request to said storage control
3 device in every predetermined period, and receives said accounting data in said every
4 predetermined period to record said accounting data in a database of said accounting server.